CENTER ROUTING SLIP

FROM: **TRAINING BRANCH**

DATE: 2 NOV 1970

TO		INITIALS	DATE	REMARKS
DIRECTOR				
DEP/DIRECTOR				
EXEC/DIRECTOR	2.	[illegible]	11/5	Mavis – Pls file
SPECIAL ASST	1.	M	11/5	Bicl
ASST TO DIR				
HISTORIAN				
CH/PPBS				
DEP CH/PPBS				
EXO/PPBS				
CH/SS	1	[illegible]	11/3	
DEP CH/SS				
SC & P				
RECORDS MGT				
PERSONNEL				
LOGISTICS				
TRAINING				
SECURITY				
FINANCE				
CH/IEG				
DEP CH/IEG				
EXO/IEG				
CH/PSG				
DEP CH PSG				
EXO PSG				
CH/TSG				
DEP CH/TSG				
EXO/TSG				
DIR/IAS/DDI				
CH/DIAXX-4				
CH/DIAAP-9				
CH/SPAD				

IP FORM 30 (7 70) OBSOLETE PREVIOUS EDITIONS

Approved For Release 2004/02/11 : CIA-RDP78B05703A000200070001-6

NPIC/SS/TB-67
2 November 1970

MEMORANDUM FOR: Executive Director, NPIC

THROUGH : Chief, Support Staff

SUBJECT : NPIC Customer Course

1. Attached is the agenda for the NPIC "Customer Course" which incorporates the comments and recommendations of OSR. For reasons both of ease of handling and of equipment and space limitations the class membership should be restricted to a maximum of ~~fifteen~~ Ten participants. Anticipated enrollment during the first year of the course could justify monthly offerings of the course.

2. A man hour/material cost estimate prepared by IEG for the proposed Customer Course is attached. This is a minimum estimate for both man hours expended on preparation and materials required. After the course has started, changes or amendments may increase the preparation cost, but this cannot be foreseen and is not included in this estimate. The estimate does not include any utility costs or any pad for contingencies that usually occur. A 15% to 20% over-cost may be considered appropriate for these contingencies. Initial total cost, which includes the 1st five day course, is estimated to be [redacted] Each course presentation thereafter would be about [redacted] not including any contingencies.

25X1
25X1

3. Courses which utilize a large number of instructors and rely upon production personnel as instructors regularly have the problem of maintaining an experienced, capable cadre of instructors. Experience has demonstrated that the instructor cadre will be continuously changed by personnel assignments, priority projects, and crash assignments. Also, good instructors need to spend more time preparing their presentations and practical exercises than the time actually spent in the classroom. This remains true even after the first and second course presentation. Production requirements often do not allow for the necessary preparation time. An example of these problems was the seven week NPIC Photographic Interpretation Course developed by the Center at considerable cost in 1963. Contractual education specialists and consultants were used to design and develop the course. The course incorporated "latest" techniques of programmed instruction. However, to conduct the course photo interpreters from within the Center were used as the instructors.

SUBJECT: NPIC Customers Course

It was this factor that caused the course to be given up after four runnings and turned over to IAD, the predecessor of IAS. After several runnings in IAD the course was again given up for the same reasons as for NPIC:

a. The difficulty in maintaining an available when needed qualified group of instructors.

b. The amount of lost production time in preparing for, updating, and conducting the course.

Based on this experience, the NPIC and IAS have relied for PI training entirely upon the Defense Sensor and Applications Training Program administered by the Air Force at Offutt Air Force Base.

4. Four days of each Customer Course presentation would require fifteen light tables (940 split-format). Conditions existing until at least early 1971 would require depriving the PI's of their light tables for use in the course. The only space available in [redacted] which could adequately accommodate fifteen 940 light tables arranged for classroom instructional purposes is the auditorium (6N-217). This space is already heavily scheduled for training through January of 1971.

25X1

5. Training Branch recommends that the Center not attempt to conduct a Customer Course until spring 1971 when there should be available the necessary light tables, classroom space, and the effect of the [redacted] work load upon the Center and upon the availability of instructional personnel from production components has been experienced.

25X1

[redacted]

25X1

Chief, Training Branch, SS/NPIC

Attachment:
a/s

SECRET

Consumer's Course Cost Estimate
(One Week)

8 October 1970

Day	No. of Briefers	No. of Manhours		REMARKS
1	7 briefers 1 Aide	15		Estimate on any materials used by Mr. Lundahl, or NRO briefers are not included.
2	2 briefers	16		Material cost against PSG
3	4 briefers	7		Material cost against PSG
4	4 briefers 1 Aide	16		Material cost against PSG
5	5 briefers 1 Aide	16		Material cost against PSG
	TOTAL	70		

25X1

25X1 Initial total cost [ ] 1st course week

25X1 Repetitive cost [ ] per course week

Note: *Fifteen light tables are required. This possibly can be computed as an additional man hour cost if any PI's are deprived of their equipment.

SECRET

NPIC CUSTOMERS COURSE

The following agenda is based insofar as possible on three guidelines:

1. A consideration of the point of view of the participating analysts, i.e. the capabilities of NPIC and the application of these capabilities to the needs of the course participants;
2. An orientation toward topics of current intelligence interest, in order to produce maximum interest and involvement on the part of the participants;
3. A selection of topics which show NPIC's contribution, both actual and potential, to the intelligence community. Briefers will be informed that the orientation of the course is not merely substantive knowledge but more importantly a discussion of the multiple and interrelated methods necessary for maximally productive interpretation.

DAY 1

0800-0930	WELCOME. INTRODUCTION TO NPIC. Brief history of the Center, photographic systems and Center intelligence contributions of the past.	Arthur C. Lundahl
0945-1045	THE COMIREX The role of COMIREX in mission planning, target prioritization, workings of the various committess, etc. Emphasis will be on the procedures which guide a targeting requirement from the originating analyst to NPIC exploitation.	[redacted] 25X1 25X1
1050-1215	MISSION PARAMETERS Discussion of [redacted] systems in general, covering such topics as scheduling, tasking of systems, orbital parameters, weather factors in targeting, limitations on mid-mission targeting, and the limitations on parameters caused by the requirement of specific parameters such as stereo or oblique coverage.	[redacted] 25X1

(Day 1, cont.)

1300-1350 AIRCRAFT AND DRONE PHOTOGRAPHY [redacted] 25X1

Discussion of drone, combat reconnaissance aircraft, SR-71, U-2R photography flown in SEA, Cuba, etc. exploited by the Center. Brief discussion of other aerial resources, such as Corridor photography, not exploited by the Center but available in the Washington area. 25X1

1400-1600 MISSION PREPARATIONS AND DATA BASE [redacted]

Pre-Mission activity, including:

Data base, prediction systems, film distribution, computer-generated support materials, mission requirements;

Mission processing, including:

Preliminary cables, OAKs, OAK Supplements

Discussion of use of collateral during mission, including the type and extent of support necessary from external components;

Data Base resources, including:

Contents and maintenance of target brief file, NPIC historical file, requester access to TBF, other machine retrieval aids.

?

DAY 2

0800-0900 IEG [redacted] 25X1

Organization and role of IEG in first-, second-, and third-phase reporting.

The role of IEG vs. IAS, specifically relating to questions generated by mission cables and OAK reports.

PHOTOGRAPHIC INTERPRETATION

A photo interpretation workshop, where all students will be introduced to photo interpretation equipment and techniques and become aware of photo interpretation terminology used in NPIC reporting.

0900-0945 Description of [redacted] photography [redacted] 25X1 25X1
and interpretation techniques applied to them.
Demonstration of light tables, optics and stereo-vision exercise.

1000-1100 KH-4B Exploitation [redacted] 25X1

25X1 1100-1200 [redacted]

1300-1330 Comparison of [redacted] (for 25X1

25X1 [redacted]

(Day 2, cont.)

1330-1445	Airfield exploitation on the light tables answering COMIREX requirements. Include examples of decrease of activity ("before and after" situation) and of dummy and decoy use.	[redacted]	25X1
1500-1615	GOB exploitation on the light tables answering COMIREX requirements. Include examples of decrease of activity ("before and after" situation) and of dummy and decoy use.	[redacted]	25X1

DAY 3

0800-0845 Exploitation category examples (Stereo pairs) on light tables with brief resume on the interpreters' first recognition of the category. [redacted] 25X1

0845-0945 MENSURATION [redacted] 25X1

Use of vugraphs, to include:

Mission - support PI

Training of personnel

Instruments - Mono, stereo, special purpose

Type of dimensional data obtainable from photography

Accuracy studies

Submission of measurement request

Mensuration vs. PI calculation

Availability of services to non-NPIC personnel 25X1

1000-1130 MENSURATION DEMONSTRATION 2N414 [redacted]

Walk-through demonstration of acquiring a measurement for the OAK

Demonstration of third-phase support, to include:

Tour of instrument area

Display and explanation of products

How requests are submitted and acted upon

Examples of mensuration problems

(Day 3, cont.)

1130-1200 PHOTO LAB 2N414 - [redacted] 25X1

Photo lab products to aid PI and photogrammetrist

Explanation of special techniques used to enhance imagery, to include:

Microdensitometer trace

Isodensitometer plot

Density cuts

Imagery enhancement

1300-1315 PI TECHNIQUES - INTRODUCTION [redacted] 25X1

1315-1415 ABM - Radar and Missile

1. Correlation of deployed activity with R&D prototypes. Graphic, mensural comparisons and shadow and image analysis. Specific examples to include characteristics of the Moscow area weapons system and purpose of TRY ADD buildings.
2. Combined mensural analysis of satellite, attache, and Soviet television photography. Specific example - The GALOSH ABM missile.

1430-1600 Practical exercise

DAY 4

PI Techniques, cont.

0800-0845 Electronics [redacted] 25X1

Discussion of the various techniques used to push the resolution beyond its system limits. How through multiple coverage and a variety of look angles and sun angles the PI extracts bits of information which, when composited, can produce quite accurate antenna and antenna system configuration, complete with mensuration. Specific topics will include tracking antennas (interferometers) and telemetry antennas.

0845-0945 Practical exercise

1000-1045 Nuclear Testing [redacted] 25X1

Both China/USSR -- Test indicators, atmospheric and below ground; techniques used in making the determination. Use of models, vugraphs.

1045-1130 Practical exercise

1215-1300 Aircraft R&D, Prototype, and Series Production [redacted] 25X1

Roof coverage studies (square footage increase) through repetitive coverage as an indicator of increased capacity and advanced model production; R&D, prototypes;
Relation of field to deployment.

1300-1415 Practical exercise

(Day 4, cont.)

1430-1515	China Naval Buildup	[redacted] 25X1
	North and South China Fleets;	
	From shipbuilding to deployment	
1515-1600	Practical exercise	

DAY 5

PI Techniques, cont.

0800-0845 ICBM [redacted] 25X1

Combination of comparative coverage and shadow analysis to develop model of SS-9 launch site.

Combination of photography of Tyuratam, photography of a damaged missile at a deployed complex, and parade photography for analysis of the SS-9 missile.

Techniques employed for identification of silos before their completion.

0845-0915 Practical exercise

0930-1015 Indications of Hostilities [redacted] 25X1

Indications of troop massing and how indicators of one aid in interpretation of successive instances.

Examples used - Czech crisis and Sino-Soviet border.

1015-1045 Practical exercise

1045-1130 Middle East Situation [redacted] 25X1

Size, shadow, and shape comparison as applied to interpretation of defensive missiles and radars.

Specific examples - UAR deployment.

1130-1200 Practical exercise

 25X1

(Day 5, cont.)

1300-1330	Quality Control and Image Evaluations	APSD/TSG
1330-1400	Imagery Exploitation Equipment Development	RED/TSG
1410-1430	FUTURE Discussion of concepts under study for use in the future, such as 24-hour surveillance, photo interpretation on-line from satellite, etc.	Reconnaissance Systems Branch/TSG
1430-1500	COLOR Discussion of the kind of intelligence that can be derived from color imagery and some of the problems inherent in its use.	[redacted] 25X1
1500-1530	[redacted]	25X1
1530-	CRITIQUE General critique and discussion, including problems and questions generated by course.	

SPEED LETTER	REPLY REQUESTED	DATE
	YES ☐ NO ☐	5 November 1970
		LETTER NO.

TO : Special Assistant, NPIC

ATTN:

FROM: Chief, NPIC/PPBS

SUBJECT: NPIC Customer Course

Al,

Accepting for the moment that such a course is both valuable and wanted by customers, I do not believe the light table and space problems are so incapable of solutions as to cause a delay until spring. Whatever delay (from this point in time, onward) should be occasioned by course design and instructor preparation and dry run. Nor do I believe the problem of availability of instructors (a realistic one, but, by the way, not the cause of the demise of the NPIC Photographic Interpretation Course, as Roger has stated) is going to be any less in the spring as it is now.

We should move ahead; I suggest, however, that as an aid to planning frequency of course presentation, and also as a sampling of need, we send a memo to Agency offices indicating our intent, our objective, tentative course outline (as presently drawn up), and requesting a response in terms of interest and anticipated participation during the course of the next six months, i.e. January - July.

Distribution:
Orig - NPIC/ODIR
2 - NPIC/PPBS

SIGNATURE

REPLY	DATE

SIGNATURE

FORM 5-67 1831 USE PREVIOUS EDITIONS

Since you asked . . .

My reaction to this is that Roger started out as a non-believer and did not consider all of the variables in remaining a non-believer.

The kind of course that Dino and Co. have drafted is similar to the "D" Program runnings and the DDS&T Career Development Courses at HQS. Some of the performers are pretty high class (MCL, [redacted], in terms of being spared from other efforts but the remainder of the program is, in effect, already existent. In general, reaction to the courses were very good.

25X1

CH/TB's concern over light tables, [illegible] are valid but are not new since July inputs

which treated the same two problems as possible stumbling blocks. My point here is that TB indicated that it would list alternatives in its final paper. I see none here. I do see an attempt to dodge the whole issue by putting the course off until April when everyone (JJH included) might forget it due [redacted] 25X1

As you know, some of the reasons for the early PI course stumbling and stuttering reflected the personalities involved and the Center overall "game plan". Many of those factors do not

standpoint of the uninitiated or partially initiated HQ's analyst they will never exist.

I believe para. 3 is not a contribution to the satisfaction of JJH's query. I believe that [redacted] for any would be disappointed in a response based on RLW's discourse. I most certainly don't believe that RLW has done enough homework to come to the conclusions noted in paras. 4 and 5.

25X1

As I said earlier... Since you asked ——